



MEDICAL UNIVERSITY - PLEVEN FACULTY OF MEDICINE

Department of pediatrics

Lecture № 2

PHYSICAL EXAMINATION

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PHYSICAL EXAMINATION

INTRODUCTION

- There is a **lack of cooperation** in children 1 to 4 year of age
- It is necessary to place the small children on a table or to sit on an **examination couch**
- The examiner should be with **warm hands**
- **The light** must be as bright as possible
- All **cloths** must be removed except shorts

● Examination should be completed **quickly**

● There is a **special order** of the examination:

Painful procedures should be **explained** to the child before

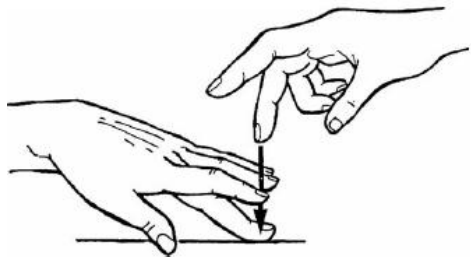
Painful area should be **examined last**

Auscultation should be done before the child begins to cry



PHYSICAL EXAMINATION METHODS

- Inspection
- Palpation
- Percussion
- Auscultation



PHYSICAL EXAMINATION INSTRUMENTS

- Stethoscope – small bell for infants, diaphragm for older children
- Tongue depressor
- Percussion hammer
- Flash-light
- Thermometer



THE ORDER OF THE EXAMINATION

GENERAL APPEARANCE

Aim- to assess whether the child seems to be well or sick

Health conditions:

- Good (stable)
- Satisfactory
- Bad
- Life-threatening



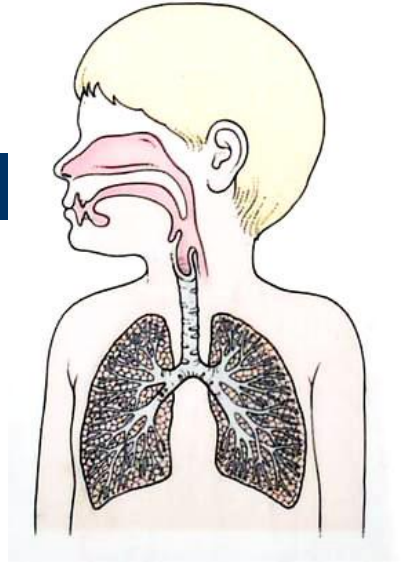
GENERAL APPERANCE

Criteria:

1. **Temperature**
2. **Face**
3. **Consciousness**
4. **Attitude** toward parents
5. **Position** in the bad (active or passive)
6. **Skin** – color, rush, turgor, skin elasticity, fat tissue
7. **Head** – size, shape, fontanels (anterior and posterior)
8. **Neck** – thyroid gland, veins distention, torticolis
9. **Lymph nodes** – size, location
10. **Muscle tone** – firmness during passive range of motion



THE ORDER OF THE EXAMINATION RESPIRATORY SYSTEM



Inspection

- Rate of breathing
- Cyanosis
- Chest retraction
- Nose discharge
- Voice
- Cough and sputum
- Chest – shape, symmetry (Pigeon breast, excavated chest, Harrison's groove, Rachitic rosary)

Palpation

- **Tactil fremitus** – vibratory sensations during crying (by palm and fingers)

Percussion

- **Resonance** – normal, increased, decreased to dullness

Auscultation

- **Breath** sounds – vesicular, bronchial (increased), decreased to absent
- **Chest** sounds – fine crackles, ronchi, wheezes, plural rub

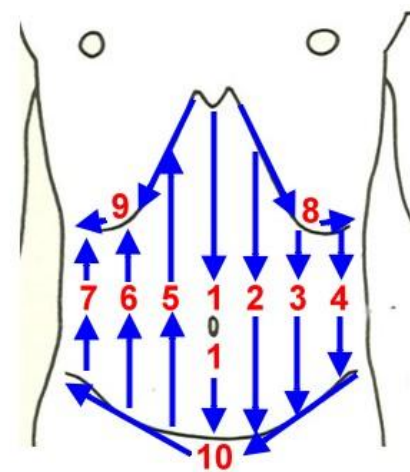
CARDIO-VASCULAR SYSTEM

- **Inspection** – heart hump
- **Palpation** – apex beat, trill, radial and femoral pulse
- **Auscultation** – rhythm, heart sounds, murmurs
- **Blood pressure**



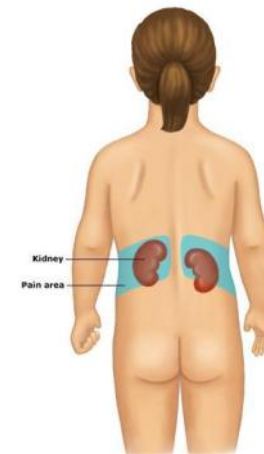
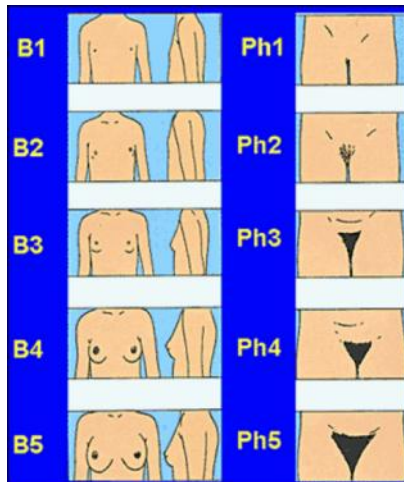
GASTROINTESTINAL SYSTEM

- **Throat** – lips, bucal mucosa, teeth, tongue, gums, palate, tonsils, pharynx, odor (using tongue depressor)
- **Abdomen** – flat or distended, pain, rigidity, peristaltic sounds 10-30 seconds (in a supine position with warm hands)
- **Liver** – size below the right costal margin, the edge (soft or sharp)
- **Spleen**



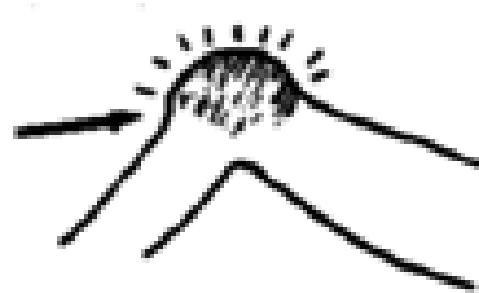
GENITOURINARY SYSTEM

- Stage of **pubertal development**
- **External genitalia** – labial folds, phimosis
- **Succussio renalis**
- **Palpation** of the kidneys for mass



MUSCULOSKELITAL SYSTEM

- **Bones** – deformities
- **Joints** – swelling, limitation of movement
- **Muscles** – tone, atrophy, hypertrophy
- **Movements**



NEUROLOGICAL SYSTEM

- Cranial nerves
- Reflexes
- Tremor, chorea, athetosis
- Signs for meningitis
- Intracranial pressure
- Sensory
- IQ



EYES

- Sclerae
- Pupils
- Discharge



EARS

- discharge

